Aug. 21, 1951 N. BURR 2,564,672

DISPLAY DEVICE

Filed July 15, 1947 4 Sheets-Sheet 1

Fig. 1.

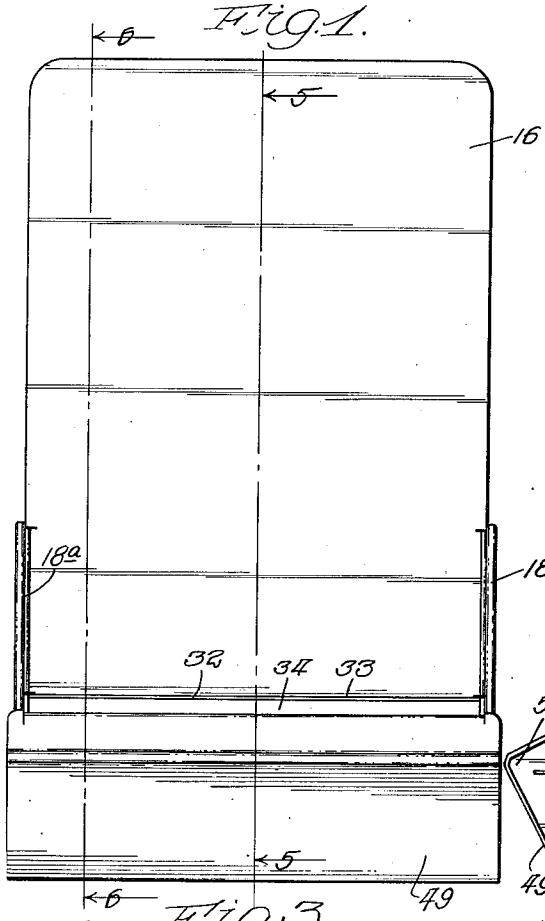


Fig. 2.

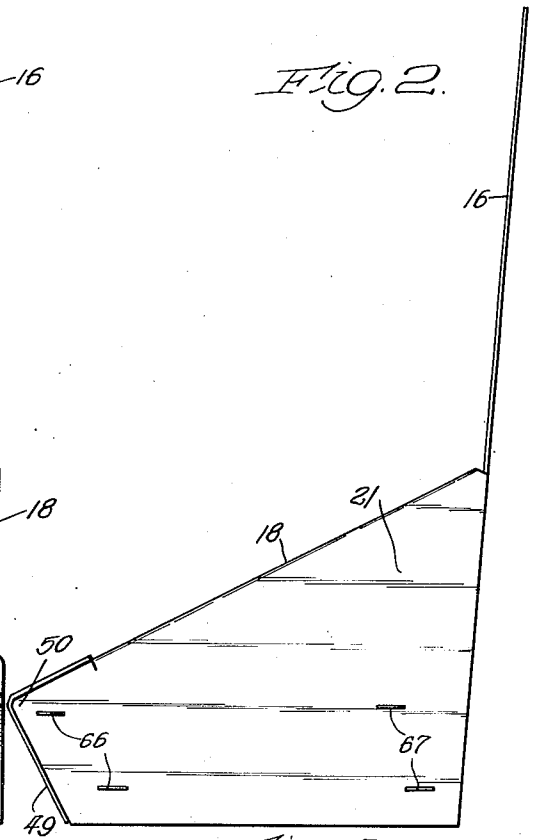


Fig. 3.

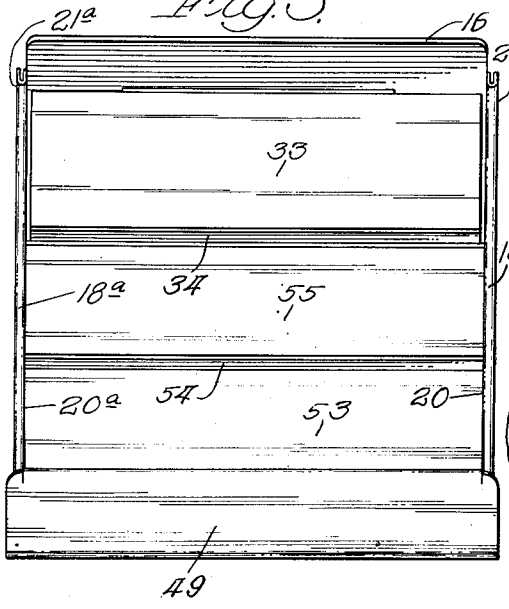
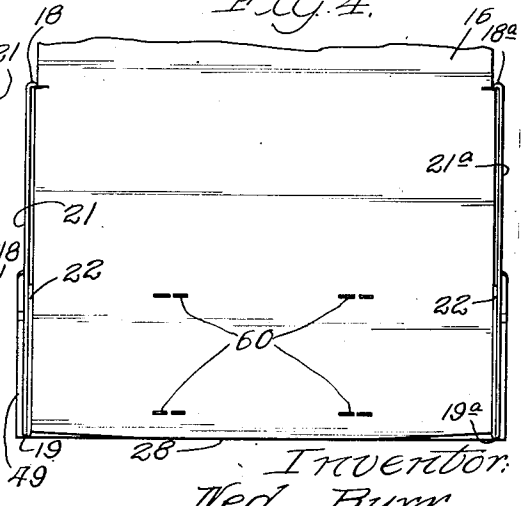


Fig. 4.



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DISPLAY DEVICE

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Fig. 5.

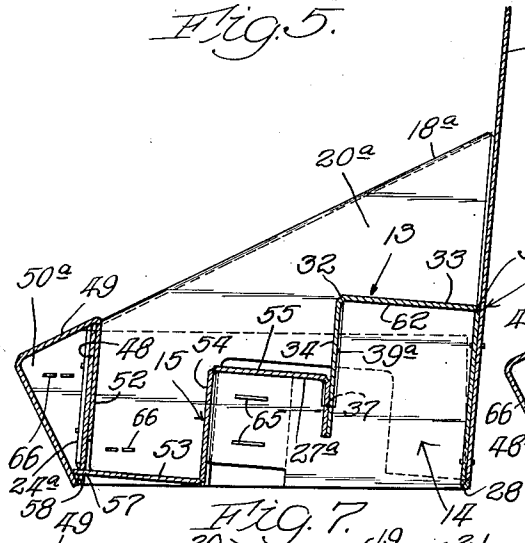


Fig. 6.

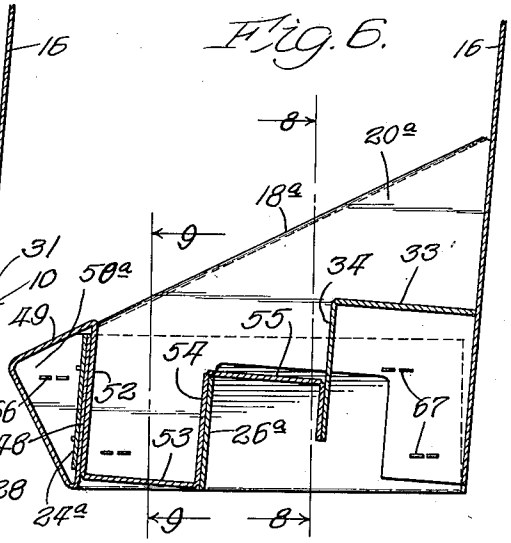


Fig. 7.

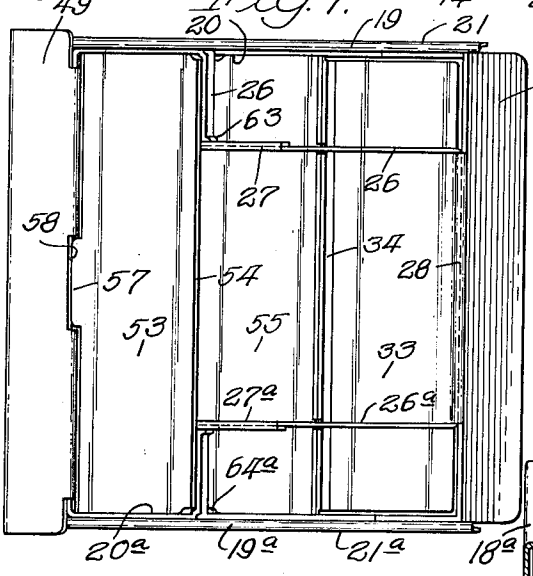


Fig. 8.

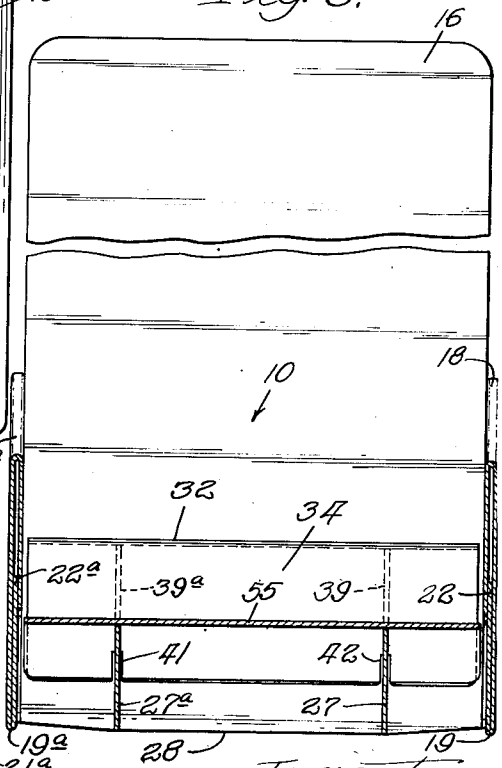
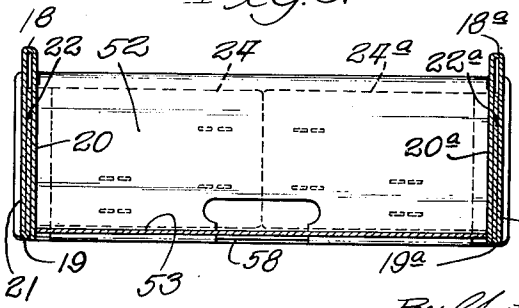


Fig. 9.



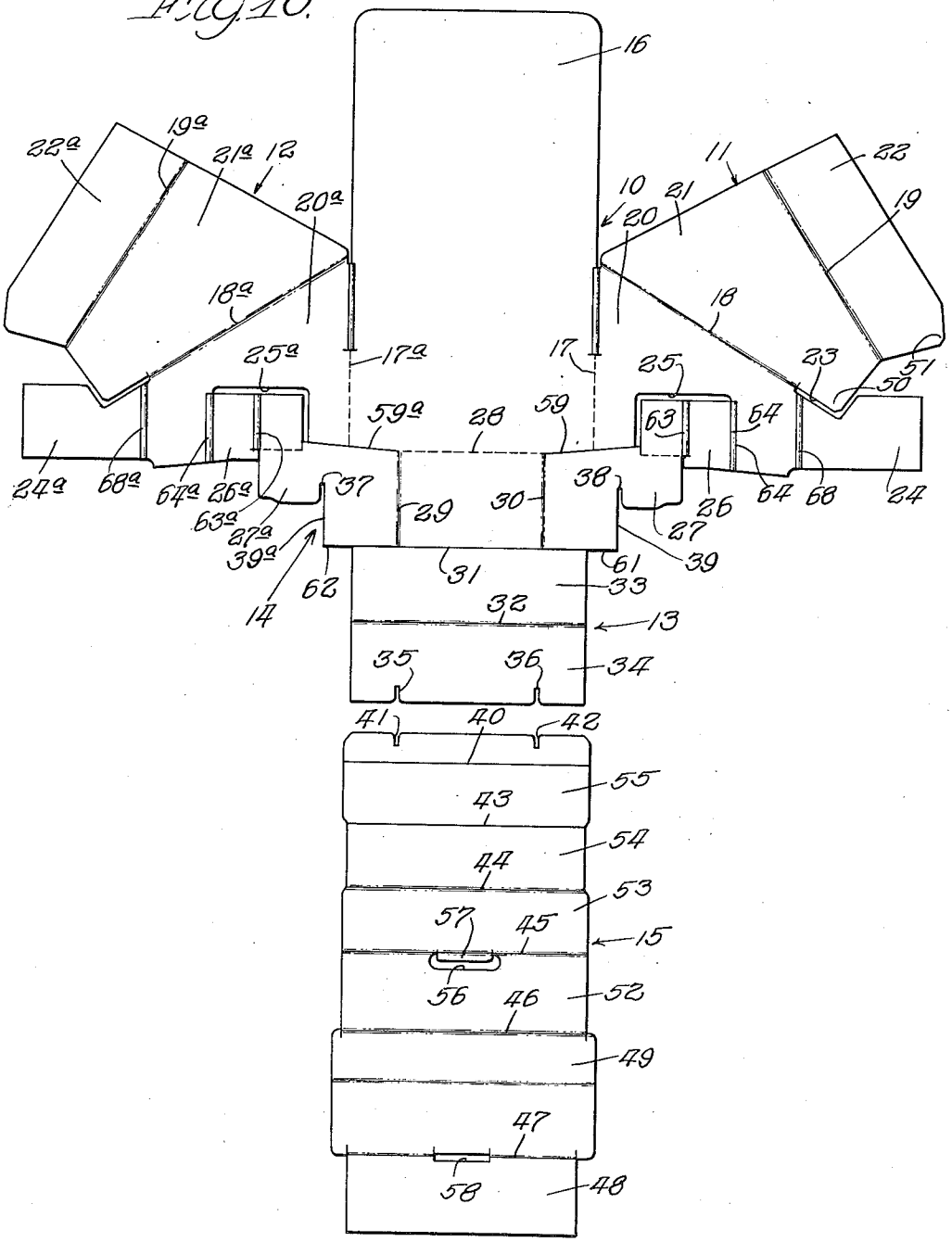
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DISPLAY DEVICE

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Fig. 10.



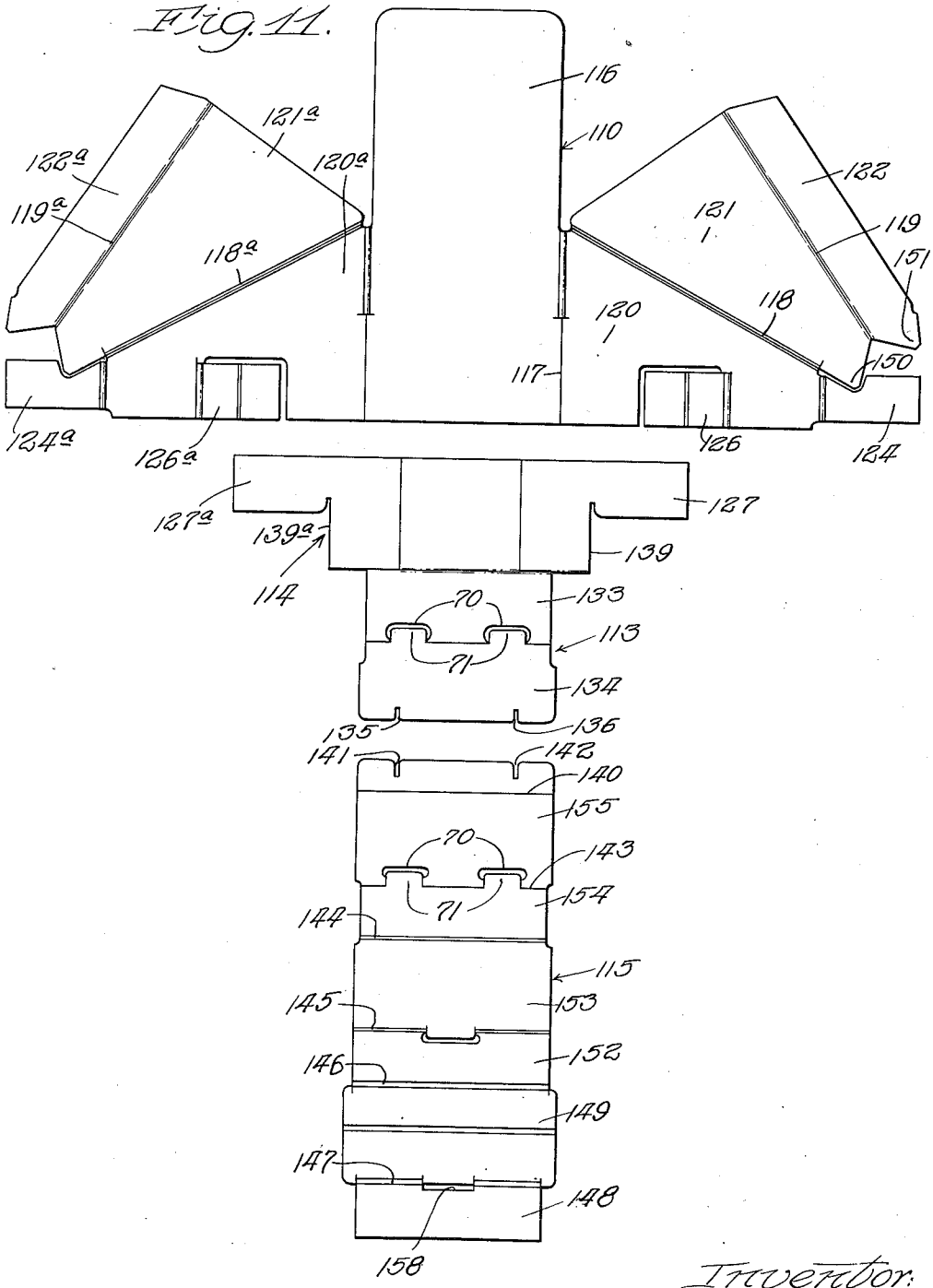
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DISPLAY DEVICE

Filed July 15, 1947 4 Sheets-Sheet 4

Fig. 11.



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UNITED STATES PATENT OFFICE

2,564,672

DISPLAY DEVICE

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Application July 15, 1947, Serial No. 761,105

11 Claims. (Cl. 211—135)

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This invention relates to a display device, and more particularly to a device for use on store counters and windows for displaying an advertising message together with merchandise.

Merchandising practices require that goods offered for sale be displayed to the prospective customer. In accordance with this practice, stores generally display their merchandise on counters and in windows. As such space may be limited, display cartons have been used to supplement other display space. Such cartons usually display advertising matter and also exhibit samples of the articles offered for sale. Such a display carton or device, to be efficient, must possess a number of qualities. It must be so designed as to waste a minimum of materials in manufacture, to require a minimum of effort of preassembly at the factory and it must be capable of being folded flat even when in a preassembled condition to save space in shipping. An additional desirable qualification for such a device is that it should be easily assembled by the ultimate user.

I have invented and am herein disclosing and claiming a display device which embodies all the above qualifications. In addition to being simply and economically manufactured, packed and assembled, the device is of extremely sturdy construction and provides a plurality of shelves upon which a number of articles may be displayed for sale.

The invention will be described in conjunction with the embodiments shown in the accompanying drawings in which:

Fig. 1 is a front elevation of the device;

Fig. 2 is a side elevation;

Fig. 3 is a top plan view;

Fig. 4 is a fragmentary rear elevation;

Fig. 5 is a vertical section along lines 5—5 of Fig. 1;

Fig. 6 is a vertical section along lines 6—6 of Fig. 1;

Fig. 7 is a bottom plan view of the assembled device;

Fig. 8 is a vertical section along lines 8—8 of Fig. 6;

Fig. 9 is a vertical section along lines 9—9 of Fig. 6;

Fig. 10 is a plan view of the device laid out for stamping or cutting and prior to assembly; and,

Fig. 11 is a view like Fig. 10 of a modified form of the display device.

As previously stated, one of the advantages of my invention is the ease and facility with which it may be stamped or cut from a large sheet of heavy paper or cardboard. As clearly shown in

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Fig. 10, the device may be cut from a single sheet into the two sections shown. The upper section of the figure is an integral section comprising a body member 10, a pair of wing members 11 and 12 extending laterally from the body members, a step forming member 13 integrally connected to an intermediate member 14 which in turn is integrally connected to the body member 10. A second section 15 may be stamped from the same sheet of cardboard and forms a second step forming member.

The body member 10 has a portion 16 adapted to appear in vertical position when the device is finally assembled and upon which an advertising message may be displayed. The wing members 11 and 12 have corresponding slits and scores, hereinafter to be described in detail, and therefore in the following description, the corresponding parts of wing member 12 will be given similar reference numerals to those given to the parts of wing member 11 with the letter "a" added.

The wing members are attached to the body member along score line 17 and are further scored along lines 18 and 19 to define a side forming portion including the three panels 20, 21 and 22. A slit 23 together with score 68 define a retaining portion 24 while a slit 25 defines a flap 26 integrally attached to a shelf supporting portion 27 of the intermediate member 14.

The intermediate member is integrally connected to the body member along the score line 28 and is provided with further score lines 29 and 30 along which the intermediate member is adapted to be folded. Integrally connected to the intermediate member along score 31 is the step forming member 13 which in turn is provided with a score line 32 along which the step forming member may be folded to form a shelf 33 and a riser 34. Slots 35 and 36 at the terminal edge of the riser portion 34 are adapted to engage notches 37 and 38 in the riser supporting portion 39 of the intermediate member.

The second step forming member 15 is provided with a score line 40 along which it may be folded to cause the slots 41 and 42 to engage the notches 37 and 38. The member is further provided with score lines 43, 44, 45, 46 and 47 along which the second step forming member may be folded in opposite directions to form a plurality of steps. The score lines just described divide the second step forming member into a portion 48 adapted to be secured to the retaining means 24 in the assembly of the device, a portion 49 adapted to be bent around the curved ends 50 and 51 of the side forming portions, a riser portion 52, a shelf por-

tion 53, a second riser portion 54 and a second shelf portion 55. The member is also formed with a slot 56 cut into the portion 52 to form a tongue 57.

In assembling the device to its preshipping condition, the intermediate member 14 is folded back along the score line 28 and slits 59 against the body member 10 and secured to the member by staples 60. The side portions are folded along score lines 17 and 17a to a position wherein they are substantially at right angles to the body member. The folding of the wing members in this manner will cause the shelf supporting portions 61 and 62 of the intermediate member to fold along score lines 29 and 30 and also cause the flaps 26 and 26a to fold along score lines 63, 63a, 64 and 64a to form with the portion 27, supporting portions for supporting the steps to be formed later by the step forming members. The portion 48 of the step forming member may then be secured by staples to the retaining portions 24 and 24a to form the device into a parallelogram with the retaining portions and the body member making up one pair of opposed sides and the side portions constituting the other opposed sides of the parallelogram. To increase the sturdiness of the device, the flaps 26 are secured to the shelf supporting portions 27 by additional staples 65. The panel 22 is folded upon panel 21 which in turn is folded upon panel 20 to create a relatively stiff and sturdy side portion and the panels may be held in such doubly folded relationship by staples 66 and 67.

The device may be assembled as just described at the factory. For ease in shipping, the step forming member 13 may be folded upwardly against the body member and the parallelogram collapsed so that the sides make angles of zero degrees with each other, the second step forming member being folded flat against the parallelogram. When so folded, the device occupies a small amount of space and a number of the devices may be shipped in a relatively small container.

The display device may be assembled for use by bringing the parallelogram to a position where the angles at the corners are again 90° curving the portion 49 over the ends 50 and 51 of the side forming portion and pressing the riser portion 52 downwardly within the device, locking the tongue 57 in the groove 58 cut in the portion 48. The shelf portion 53 then forms a first shelf with the riser portion 54 extending upwardly therefrom and spaced from the riser portion 52 the width of the shelf 53. A second shelf is formed by the portion 55 which shelf is folded along the score line 40 with the slots 41 and 42 engaging the notches 37 and 38. The first step forming member may then be folded downwardly along the score line 32 and the slots 35 and 36 inserted in the same notches 37 and 38. The device when so assembled forms three shelves, 53, 55 and 33 and three risers, 34, 54 and 52. The device when so assembled is extremely sturdy and, as the shelves are supported intermediate their ends by the supporting 61, 62 and 27, is capable of supporting moderately heavy weights, for example, bottled goods of various sorts such as cosmetics.

It is clear from the foregoing that while I have described my invention in its preferred embodiment, various changes may be made in the construction of the device. For ease and economy of assembly, I have shown the device as comprising but two sections, each being slitted and scored to divide the sections into the various portions and members just described. It is obvious that the device could be made in more than two sections, for example, the wing members 11 and 12 could be cut separately and stapled to the body member and the intermediate and step forming members could also be made separate as could the retaining means and various other portions.

As an example of a form modified in the manner suggested, I will describe the embodiment shown in Fig. 11 which is substantially similar in all respects to the previous embodiment with the exception that the intermediate member 114 is separate from the body member 110. In the preshipping assembly of the device, the intermediate member is placed against the body member and stapled thereto rather than being folded against the member as was the previously described embodiment. In substantially all other respects, the device of Fig. 11 is similar to the device of Fig. 10, and like parts have been given like numerals differing by an even one hundred.

As an additional feature, the shelf and riser portions of the device of Fig. 11 have slots 70 cut therein to form stops 71 in the riser portions. When the step forming members are folded to form the various steps and risers, the stops 70 upstand from the risers in a vertical direction. When a number of articles, such as boxes of cosmetics and the like, are stacked upon the shelves, the stops 70 serve to prevent the boxes from sliding off the shelves.

While I have shown and described my invention in its preferred embodiment and with one modification, it is clear that it is capable of other and further modifications without departing from the spirit and scope of my invention as fet forth in the appended claims.

I claim:

1. A display device comprising a substantially vertical body member having a portion upstanding above the device for displaying a message; a pair of side portions connected to the body portion; retaining means connected to the side portions, said retaining means being folded at right angles to the side portions and secured together to form a parallelogram with the side portions and the body member; an intermediate member attached to the body member and to the side portions, said intermediate member being folded to a vertical position within the parallelogram and having edges forming a riser supporting portion and a plurality of shelf supporting portions; a first step forming member connected to the intermediate member and being folded to form the step forming member into a riser portion overlying and resting upon the riser supporting portion and a shelf portion overlying and supported by a shelf supporting portion; a second step forming member folded to form the second step forming member into a plurality of riser portions and shelf portions, said second step forming member being attached to the parallelogram and folded to form a plurality of shelves and risers, at least one of the said shelves overlying and being supported by another of said shelf supporting portions.

2. An article of manufacture of sheet material comprising a substantially rectangular body member; a pair of wing members integral with the body member and extending from opposite sides thereof, each of said wing members being scored and slitted to define a side forming portion and a retaining portion; an intermediate member having one edge secured to one end of the body member and having a pair of parallel score lines

intersecting said edge at an approximately 90° angle to define a pair of riser supporting portions each having a linear edge between each of said parallel score lines and the adjacent end of said intermediate member; a step forming member having one edge secured to the portion of the opposite edge of the intermediate member lying between said parallel score lines, said step forming member having a transverse score therein to divide it into a step portion and a riser portion, said retaining portions being adapted to be secured together to form a parallelogram with the side portions and the body member, said step forming member being adapted to be folded along said transverse score line to form a step and riser, and said intermediate member being adapted to be folded along its said edges and parallel score lines to position said linear edge beneath the step for supporting the same and to provide a portion for supporting the riser.

3. The article of claim 2 in which said step forming member, said intermediate member and said body member are integrally connected to each other.

4. An article of manufacture of sheet material comprising a substantially rectangular body member; a pair of wing members integral with the body member and extending from opposite sides thereof, each of said wing members being scored and slitted to define a side forming portion and a retaining portion; an intermediate member having one edge secured to one end of the body member and having a pair of parallel score lines intersecting said edge at an approximately 90° angle to define a pair of riser supporting portions, each of said last-named portions having a first linear edge along the opposite edge of the intermediate member extending from the score line to the adjacent end of said riser supporting portion, a notch in said end and a step supporting portion having a second linear edge extending from the notch; a first step forming member having one edge secured to the portion of said opposite edge of the intermediate member lying between said parallel score lines, said step forming member having a transverse score line to divide it into a step portion and a riser portion; a second step forming member having transverse score lines therein to divide it into a first portion adapted to be secured to the retaining means, a second portion adapted to be folded over the ends of the side portions, a third portion adapted to be folded to form a second step and riser and a fourth portion adjacent the second step, said retaining portions being adapted to be secured together to form a parallelogram with the side portions and the body member, said first step forming member being adapted to be folded along its transverse score line to form a first step and riser and said intermediate member being adapted to be folded along its said edges and parallel score lines to position the first linear edges beneath the first step and to position the second linear edges beneath the second step for supporting said steps, with the edge of the first riser portion and said fourth portion being adapted to be positioned in and supported by said notches.

5. The article of claim 4 in which each step supporting portion and the wing member adjacent thereto are connected by a flap having score lines parallel to said edges of the body member and a substantially L-shaped slit permitting the folding of the flap under said second step when the article is in assembled position.

6. The article of claim 4 in which each of said side portions is provided with two spaced score lines to divide each side portion into three panels, with each side portion being adapted to be folded upon itself along said score lines with the panels in face to face contact to form relatively stiff sides.

7. An article of manufacture of sheet material comprising a substantially rectangular body member; a pair of wing members integral with the body member and extending from opposite sides thereof, each of said wing members being scored and slitted to define a side forming portion and a retaining portion; an intermediate member having one edge adapted to be secured to one end of the body member and having a pair of parallel score lines intersecting said edge at an approximately 90° angle to define a pair of riser supporting portions each having a linear edge between each of said parallel score lines and the adjacent end of said intermediate member; a step forming member having one edge integrally connected to the portion of the opposite edge of the intermediate member lying between said parallel score lines, said step forming member having a transverse score therein to divide it into a step portion and a riser portion, said retaining portions being adapted to be secured together to form a parallelogram with the side portions and the body member, said step forming member being adapted to be folded along said transverse score line to form a step and riser, and said intermediate member being adapted to be folded along its said edges and parallel score lines to position said linear edge beneath the step for supporting the same and to provide a portion for supporting the riser.

8. An article of manufacture of sheet material comprising a substantially rectangular body member; a pair of wing members integral with the body member and extending from opposite sides thereof, each of said wing members being scored and slitted to define a side forming portion and a retaining portion; an intermediate member having one edge adapted to be secured to one end of the body member and having a pair of parallel score lines intersecting said edge at an approximately 90° angle to define a pair of riser supporting portions, each of said last-named portions having a first linear edge along the opposite edge of the intermediate member extending from the score line to the adjacend end of said riser supporting portion, a notch in said end and a step supporting portion having a second linear edge extending from the notch; a first step forming member having one edge secured to the portion of said opposite edge of the intermediate member lying between said parallel score lines, said step forming member having a transverse score line to divide it into a step portion and a riser portion; a second step forming member having transverse score lines therein to divide it into a first portion adapted to be secured to the retaining means, a second portion adapted to be folded over the ends of the side portions, a third portion adapted to be folded to form a second step and riser and a fourth portion adjacent the second step, said retaining portions being adapted to be secured together to form a parallelogram with the side portions and the body member, said first step forming member being adapted to be folded along its transverse score line to form a first step and riser and said intermediate member being adapted to be folded along its said edges and parallel score lines to position the first linear edges beneath the first step and to position the

second linear edges beneath the second step for supporting said steps, with the first riser and said fourth portion being adapted to be positioned in and supported by said notches.

9. The article of claim 8 in which said step supporting portion and the wing member adjacent thereto are connected by a flap having score lines parallel to said edges of the body member and a substantially L-shaped slit permitting the folding of the flap under said second step when the article is in assembled position.

10. The article of claim 9 in which each of said side portions is provided with two spaced score lines to divide each side portion into three panels, with each side portion being adapted to be folded upon itself along said score lines with the panels in face to face contact to form relatively stiff sides.

11. An article of manufacture of sheet material comprising a substantially rectangular body member; a pair of wing members integral with the body member and extending from opposite sides thereof, each of said wing members being scored and slitted to define a side forming portion and a retaining portion; an intermediate member having one edge adapted to be secured to one end of the body member, said intermediate member having a substantially rectangular central portion delineated by spaced parallel score lines intersecting said edge at an approximately 90° angle to define a pair of laterally extending riser supporting portions each having a linear edge between each of said parallel score lines and the adjacent end of said intermediate member; a step forming member having one edge secured to the portion of the opposite edge of the intermediate member lying between said parallel score lines, said step forming member having a transverse score therein to divide it into a step portion and a riser portion, said retaining portions being adapted to be secured together to form a parallelogram with the side portions and the body member, said step forming member being adapted to be folded along said transverse score line to form a step and riser, and said intermediate member being adapted to be folded along its said edges and parallel score lines to position said linear edge beneath the step for supporting the same and to provide a portion for supporting the riser.

NED BURR.

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